Brief description of work: The U.S. Department of Energy's (DOE's) National Energy Technology Laboratory (NETL), intends to issue Financial Assistance Solicitation No. DE-PS26-00NT40779 entitled "Hybrid Power Systems." The goal of this procurement is to aid the development of systems that will produce affordable, safe, environmentally-friendly electrical power with a goal of eventually being 70+ percent efficient (lower heating value) from fossil fuels. The work will focus on proof-of-concept systems of suppliers' market entry product. The system shall contain any combination of existing or "near-term" power industry fuel-to-electricity conversion equipment. One of these components must be a high-temperature fuel cell.

The work performed under this action will consist of three phases. The first phase will entail identification and resolution of barrier issues of the proposed hybrid system. This will include concept identification, system definition, economic evaluation, and experimental work to resolve any barrier issues. This information will be used by DOE for system validation. The second phase will consist of a detailed design and cost study of the proposed system. The third phase will include fabrication and proof-of-concept testing of the proposed system. If a potential offeror believes that there are no barrier issues in their proposed system, and has all of the information that would be required in the first phase, the offeror can petition to DOE to initially start the project in Phase II.

The proposed system must contain a high-temperature fuel cell combined with other power generation modules. Typical acceptable power generation modules are: Another fuel cell, steam turbines, gas turbines, diesels, other heat engines, etc.. Unacceptable modules are: Photovoltaic, wind, tidal systems. The system must be fueled by natural gas.

The offerer must be a commercial producer of a major component of the proposed system or must partner with commercial producers of the major components (defined as power producing units such as fuel cells, turbines, etc.). While the goal of this procurement is to produce systems with energy efficiencies greater than 70 percent, it is anticipated that the initial market entry systems, investigated under this solicitation, may have efficiencies less than this.

DOE anticipates multiple cooperative agreement awards resulting from this solicitation and no fee or profit will be paid to a recipient or subrecipient under the awards. For agreements spanning more than one maturation stage, continuation decision points will be inserted at the completion of each stage. Additional decision points may be required depending upon the length of any one maturation stage. This particular program is covered by Section 3001 and 3002 of the Energy Policy Act (EPAct), 42 U.S.C. 13542 for financial assistance awards. EPAct 3002 requires a cost-share commitment of at least 20 percent from non-Federal sources for research and development projects and at least 50 percent for demonstration and commercial projects. Depending on the phase and maturation stage of the agreement, cost-share expectations will range from 20 to 50 percent. The particular program is also covered by Section 2306 of EPAct, 42 U.S.C. 13525 for financial assistance awards. The solicitation will contain as part of the application package the applicable EPAct representation form(s) for Foreign-owned companies. In accordance with FAR 52.232-18, "Availability of Funds," funds are not presently available for this procurement. The Government's obligation under this award is contingent upon the availability of appropriated funds from which payment for award purposes can be made, however, it is anticipated that two to

four awards will be made during the first quarter of Fiscal Year 2001, with an average total estimated cost from $5 to $15 million.

Solicitations will not be distributed in paper form or on diskette. It is anticipated that the solicitation will be available on or about April 24, 2000. The exact date and time for the submission of proposals will be indicated in the solicitation, however, at least a forty-five (45)-day response time is currently planned. It is DOE's desire to encourage the widest participation including the involvement of individuals, corporations, non-profit organizations, small and small disadvantaged businesses, educational institutions, and state or local governments or other entities. Prospective applicants who would like to be notified as soon as the solicitation is available should register at http://www.netl.doe.gov/business. Provide your E-mail address and click on the "Advanced Electric Power Generation" technology choice located under the heading "Fossil Energy." Once you subscribe, you will receive an announcement by E-mail that the solicitation has been released to the public. Telephone requests, written requests, E-mail requests, or facsimile requests for a copy of the solicitation package will not be accepted and/or honored. Applications must be prepared and submitted in accordance with the instructions and forms contained in the solicitation. The actual solicitation document will allow for requests for explanation and/or interpretation.